

New Operations Control Center added to Space Vehicle Mockup Facility

The Space Vehicle Mockup Facility located in Bldg. 9N serves a variety of JSC customers. Housed in the SVMF are nineteen station module mockups and three shuttle mockups, along with several miscellaneous trainers.

In an effort to better serve the center needs, facility operations contractor Johnson Engineering developed the Operations Control Center in collaboration with the EVA, Robotics, and Crew Systems Division's SVMF Office to serve as the central point of contact for anyone working in or visiting the SVMF. The OCC maintains overall cognizance of all personnel and activities in the facility, with the knowledge to supply data to any internal and external customers. Other OCC functions include metrics generation and reporting, short-term activity scheduling, discrepancy report collection, daily status report generation, safety and management notification.

After or during the tour or training, customers should report any discrepancies, close calls, mishaps, and tour or training results to the OCC. The OCC needs this

data for the appropriate actions to be taken, and to be added to its daily status report.

John Sims, chief of the SVMF Office, commented that, "The OCC has proven to be a valuable asset to NASA management. Having the OCC as the center point

of contact reduces scheduling, training, maintenance, and tour conflicts. It also provides a focal point for our facility users for information and support."

In addition to daily training activities, the SVMF supports a large number of

official, VIP and other tours every week. These are in addition to the numerous Space Center Houston daily tours. Les Holt, Johnson Engineering OCC supervisor, said, "The OCC has kept tours and tourists from impacting instructor and crew training classes and maintenance activities. This new effort has greatly increased the efficiency of the SVMF. Maintaining safety for both the JSC employees and visitors is OCC's primary concern."

Whenever you visit the SVMF, the first step is to check in with the OCC. They will greet you with a smile, a professional attitude, and a list of "do's and don'ts" for the facility. Please remember that all people in the facility must be badged. If you are conducting a tour, everyone in the party must be badged either through Bldg. 110 or with a visitor's badge from your division office. ■



ASA JSC Photo S99-12820 by Bill Stafford

The Operations Control Center Team, from left, front: Jill Fritz, Joanne Strickland, Jesse Zamarron; back: Frank Martinez, Kimberley Butler, Pam Pottorff. Not pictured: Frances Gossett, Marisela Smith, Ted Yancy.



Baikonur – *only a phone call away*

By Carlos Fontanot

Since the late 1950s, Baikonur has been the prime launch site for Moscow's space program. Located in the nation of Kazakhstan in Central Asia, the Baikonur Cosmodrome also serves as the main launch site for commercial space enterprises and key International Space Station elements such as the Zarya base block, the soon-to-be-launched Zvezda Service Module, and Soyuz/Progress vehicles.

On October 16 in a small ceremony, NASA opened an office at Baikonur to better support ISS cargo integration and Service Module pre-flight activities. The new office is just down the hall from the high bay where Service Module integration work is currently in progress. It consists of a conference room and an office with four desks, office furniture, three PC stations, direct NISN phone and fax lines to Moscow and the USA, and a Moscow phone line.

The 50-square-meter office space is a great improvement for visiting NASA personnel traveling to the cosmodrome. In the past, employees had to find a chair or

a place to sit down and work, there were no phones available other than cell phones that did not always work, and fax capability was not available. Today, there are data lines for e-mail and other real-time communications with NASA offices in Moscow and the USA.

"Our new office will be a learning center for our personnel," said Dave Lengyel, Moscow Technical Liaison Office manager, who is responsible for coordinating the flight integration operation in Baikonur and has arranged at least ten trips to the cosmodrome since June of this year. "We have a lot of work to do in preparation for a very busy flight schedule and a lot to learn from our Russian colleagues in Baikonur," he said, pointing out that the new office will improve the work flow and communications, especially over the next year when the Service Module, several Progress supply vehicles and the Expedition One crew will be launched from the cosmodrome.

The idea to establish an office in Baikonur came during the Phase One lessons learned process. It became imminent that a NASA presence at the flight integration site was required

when the Service Module left Moscow via rail car on May 13 and was transported to Baikonur. Working with the Service Module Launch Package Manager, Gordon Ducote, ISS officers in Houston and Moscow went to work and completed contract negotiations with Russian counterparts earlier this year to establish the office. The agreement became an official part of the Joint Program Review protocol signed in April. "At the beginning, the project seemed simple enough, but soon it turned incredibly complicated, due to the high security requirements and stringent customs regulations to import computers and communications equipment to Baikonur," said Lee Pagel, MTLO business manager, who worked the administrative details, in particular the procurement and customs aspects, with Russian and Kazak officials. It took close to nine months before

everything was in place to open the office. NASA expects to provide the Russian Space and Aeronautics Agency with similar office space at KSC.

When NASA and contractor personnel in Baikonur go to work every day, they now have a functional workspace with an adequate communications infrastructure to efficiently work vehicle and cargo integration projects. Their short commute takes them past historic sites such as Gagarin and Korolev's former homes. The launch pad that was used to launch

Sputnik, the first Russian ICBM, and Gagarin into space is also on the way. Occasionally, a camel or a pack of wild dogs may greet them on the way to their new office. ■

Carlos Fontanot is on a one-year assignment in Moscow for the Public Affairs Office.

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– Dave Lengyel

Hubble

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Foale has space-walking experience both outside the shuttle and Russia's Mir space station. But a Hubble servicing mission is one Foale had in mind long before his trip to Mir.

"I'm realizing a dream," he says, adding that this fulfills "a desire to go and visit the Hubble Space Telescope and do the EVA – to see the telescope in all its glory and also see the Earth from very high up."

Hubble orbits at nearly the highest point reachable by the shuttle at nearly 350 miles.

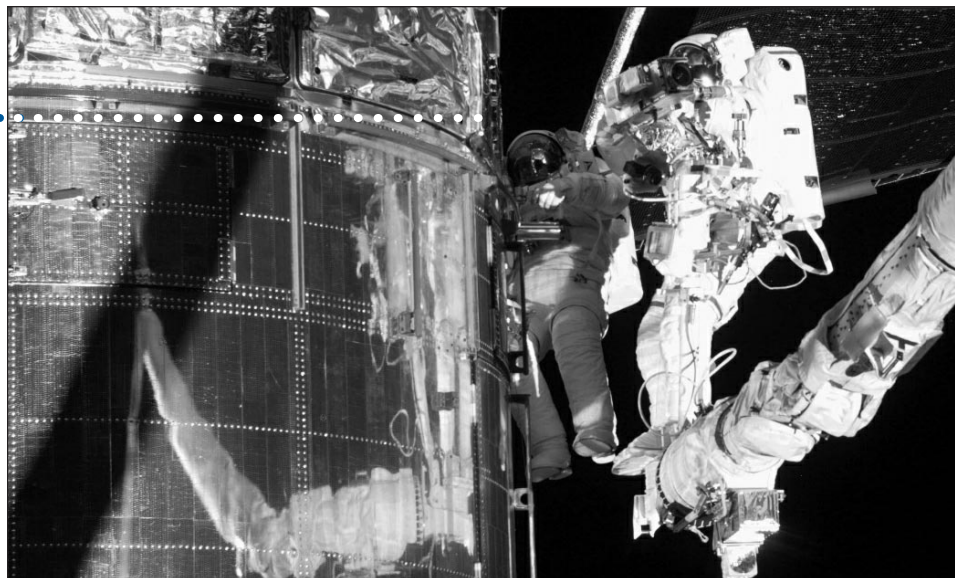
On the third space walk, Smith and Grunsfeld will venture out once again to perform tasks, including replacing a transmitter; swapping a reel-to-reel tape recorder with a solid state recorder; and installing protective insulation on the 'hot' side of the telescope which has deteriorated from the effects of the harsh space environment.

The last space walk has Foale and Nicollier heading out to apply some more protective insulation on the upper portion of the telescope almost exactly like wallpaper. They also will place protective covers around some flaking handrails.

Nicollier, performing his first-ever space walks, has seen the telescope up close – albeit from inside as the primary robot arm operator back in 1993.

"Hubble is very close to my heart and going back... is really a great privilege for me," Nicollier says.

Once the mission is over and the stillness of space envelopes Hubble once again, observations will resume until the next visit of a shuttle for further maintenance tasks in 2001. On that flight a new set of high-performance solar arrays will be installed in similar fashion to what was



NASA Photo 82e5718

STS-82 astronauts Steve Smith and Mark Lee service the Hubble Space Telescope.

done on the first servicing mission. Also, a new Advanced Camera for Surveys will be installed as will a cooling system for other science instruments.

But for now, Hubble waits patiently for its first visitors in nearly three years, and continues to make itself available to astronomers around the world who have the knowledge and imagination that made such a spacecraft possible in the first place. ■